

CLAIMS

What is claimed is:

1. A charging station for a rechargeable battery (5) that can be physically and electrically connected to the battery (5) having charger electronics (2) in a charger housing (3) and an electrical and physical contact interface (4) for the battery (5), wherein an air blower (6) is arranged in the charger housing (3) for producing an air current (L) through two air vents (7a, 7b), wherein one air vent (7a) is associated with the physical contact interface (4) of the battery (5), and wherein the charger electronics (2) is heat-transfer arranged in the air current (L).
2. The charging station of claim 1, wherein the physical contact interface (4) of the battery (5) is spatially associated with an air vent (7a) on a flow inlet side.
3. The charging station of claim 1, wherein the air blower (6) is arranged between the air vent (7a) on a flow inlet side and the charger electronics (2).
4. The charging station of claim 3, wherein the air vent (7a) on the flow inlet side forms a plurality of surface-distributed air inlet points (8) each associated with cooling vents (9) of the battery (5).
5. The charging station of claim 3, wherein a pressure chamber (10) having low flow resistance is arranged between the air blower (6) and the air inlet points (8).
6. The charging station of claim 1, wherein the air vent (7a) on the flow inlet side is arranged in

an upper section of the charging station (1).

7. A cooling process for a charging station (1) for a rechargeable battery (5) that is electrically and physically connected to the battery (5), wherein an air volume (V) of an air current (L) is moved by an air blower (6) arranged in the charger housing (3) of the charging station (1), comprising, a first step, wherein the air volume (V) at a cooling temperature CT is moved heat-transfer into the battery (5), and, in a second step, the air volume (V) at an intermediate temperature $IT > CT$ permeates the charger housing (3) containing the charger electronics (2).